

INTESTINAL OBSTRUCTION DUE TO BANDS, THE RESULT
OF A FORMER APPENDECTOMY AND COMPLICATED
BY A VOLVULUS OF THE MESENTERY.

BY

FRANCIS J. SHEPHERD, M.D.,

Professor of Anatomy, McGill University : Surgeon to the Montreal General
Hospital.

Alex. M., æt. 27, was admitted into the Montreal General Hospital on May 9th, 1898, suffering from symptoms pointing to obstruction as evidenced by vomiting, constipation, distension and tenderness of the abdomen.

Two days before he was suddenly seized with severe abdominal pain confined to a small area, two inches below the umbilicus. Soon after this he commenced vomiting and the vomiting has continued fairly constantly ever since. Purgatives of all kinds were administered, including castor oil and salts, without effect, so he was sent to the hospital. On admission he was found to have a subnormal temperature ($97\frac{1}{2}^{\circ}$), a rapid, weak pulse (140), and a very anxious expression of countenance. His tongue was dry and brown; he had contracted pupils. There was no rigidity of the abdomen, but it was somewhat distended and very tender below the umbilicus, and he complained of severe pain in this region. There had been no motion of the bowels or escape of flatus for two days. Although he was not vomiting he had a feeling of nausea. In the right iliac region was seen a scar due to an operation for appendicitis performed some there years before, in the centre of this was a small hernial protrusion. Liver and spleen dulness normal, and in the right flank a dull area was made out. Owing to this serious condition immediate operation was determined upon.

An incision, three inches long, was made in the median line below the umbilicus. On opening the peritoneum a quantity of reddish coloured serum escaped and distended dark coloured bowel presented at the opening. There were ecchymoses in spots. On introducing the fingers a band was felt in the right inguinal region near the site of the old wound, running to the mesentery and constricting the ileum. The band was divided between the ligatures; this did not relieve the distension, and on further examination a large por-

tion of small intestine was seen hanging through another loop or band, but not acutely constricted by it. This was also divided, still there was no relief, the bowel seemed to be lifeless, and no peristalsis was present, so the incision was enlarged and a further examination revealed a twist to the right of the whole mesentery. There was now nothing for it but to turn out the whole of the small intestines so as to untwist them. This was done, the intestines being covered by hot towels. They were then replaced, the wound sutured and the man returned to bed. I might mention that the wound was not completely closed, but iodoform gauze was introduced in various directions amongst the coils of intestines and a glass tube into the pelvis. The man rapidly improved and never had a bad symptom. The bowels moved next day and recovery was rapid.

In this case the volvulus was probably consequent on the constriction. These cases of intestinal obstruction are always a source of great anxiety to the surgeon and should be operated on as early as possible. The results from obstruction by bands, pressure of tumours, volvulus, &c., are not nearly as good as where the obstruction is due to some constriction within the lumen of the bowel or where resection is necessitated. Kocher has shown that any over distension of the bowel with gas or feces, produced by constriction and without any interference with the mesenteric circulation, will cause congestion of the bowel, blueness, and consequent venous stasis. Then follow ecchymoses in the mucous membrane, alteration and distension of epithelium leading to ulceration above the constriction. Now from this moment absorption of septic products commences from the fecal contents and your patient will die from general intoxication which will cause heart failure and collapse, or the bowel conditions may lead to necrosis and perforation.

Kocher advises in these cases an incision into the distended bowel and the washing out of as much as possible of its septic contents. This in a strong person will do no harm and perforations which are commencing will be detected, and if the person has a weak heart there is no better stimulant than removing the toxic products. Kocher advises emptying the bowel also in those cases where the patient's condition is such that a prolonged operation or resection would not be tolerated. In such cases washing out of the stomach should first be tried.